

## XP-002079250

1/1 - (C) WPI / DERWENT  
AN - 89-325039 ç45!  
AP - DD880312703 880208  
PR - DD880312703 880208  
TI - Prepn. of microporous active carbon from lignite coke -  
by activation in atmos. contg. steam and carbon  
di:oxide, limiting heat supply  
IW - PREPARATION MICROPOROUS ACTIVE CARBON LIGNITE COKE  
ACTIVATE ATMOSPHERE CONTAIN STEAM CARBON DI OXIDE LIMIT  
HEAT SUPPLY  
IN - HESCHEL W; KLOSE E; KRAFT M; MOBIUS R; SPINDLER H;  
SZARGAN P  
PA - (VELW ) VEB LEUNA-WERKE ULBRICHT W  
PN - DD268677 A 890607 DW8945 005pp  
ORD - 1989-06-07  
IC - C01B31/10  
FS - CPI  
DC - E36 J01  
AB - DD-268677 Microporous active C is prepd. from lignite  
coke by partial gasification in a medium contg.  
H2O/CO2, activation at 980-1200 K, in absence of O2,  
batchwise or in a reactor with a narrow range of  
residence time, and addn. of reaction heat of 100-800  
kJ/kg C. The activated C is cooled, opt. extd., washed  
with water, and dried.  
- Pref. the raw material is lignite low temp. coke (BTT  
coke) from carbonisation involving gas recirculation;  
the gas used for activation is obtd. by combustion of  
gases contg. hydrocarbons in air at gamma less than 1,  
in a pre-inserted combustion chamber; and the amt. of  
reducing gases CO and H2 is above 5%.  
- USE/ADVANTAGE - The C has 35-45% porosity, with half of  
the pores having dia. 0.4-0.7 nm, the rest being  
transport pores with dia. above 20 nm. The mesopores  
form less than 10% of the total pore vol. The sepn.  
properties are similar to those of molecular sieves.  
The active C is used for purificn. and sepn. of  
gases.(0/0)